



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,090	03/31/2004	Raffaele Fina	1.G164.202DIV	5654
35280	7590	10/28/2004	EXAMINER	
BUGNION S.A. CASE POSTALE 375 ROUTE DE FLORISSANT 10 GENEVA 12, CH-1211 SWITZERLAND			HINZE, LEO T	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/813,090	Applicant(s) FINA, RAFFAELE	
	Examiner Leo T. Hinze	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/130,637.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2854

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 7 refers to “claim 7” in line 2. To expedite prosecution, examiner will assume that “claim 7” in line two should be --claim 6--.

Appropriate correction and/or clarification is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Cushner et al., US 5,804,353 (Cushner).

Regarding claim 1, Cushner teaches an inking plate for a rotary printing machine the inking plate having a substantially cylindrical form (“cylindrical form”, col. 4, line 30) thus defining an inner, central area, and being formed of at least a base plate (“flexible support”, col. 3, line 35) having an outer major surface to be directed away from the

Art Unit: 2854

central area and two polymer materials defining two successive layers (“elastomeric intermediate layer”, col. 3, line 36, and “reinforced elastomeric top layer”, col. 3, lines 37-38) deposited (“spraying”, col. 4, line 24) directly or indirectly on said base plate over a majority of the outer surface of the base plate thus defining an inner layer and an outer layer of deposited material, wherein exclusively the outer layer of the inking plate is cut (“relief pattern... formed only in the top layer”, col. 13, lines 10-12) so as to define relief surfaces having limits corresponding to the outlines of surfaces to be inked.

Regarding claim 2, Cushner also teaches all that is claimed as discussed above, including comprising a layer of adhesive (“thin adhesive layer”, col. 18, line 9).

Regarding claim 8, Cushner also teaches all that is claimed as discussed above, including wherein the cutting of the deposited material occurs when the base plate is held in a cylindrical form so as to permit mounting on the cylinder without substantial deformation, from an as-cut state, of the base plate or the deposited material (col. 4, lines 38-44).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2854

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cushner in view of Fan et al., US 5,607,814 (Fan) and Recchia et al., US 3,951,657 (Recchia).

Cushner teaches all that is claimed as discussed in the rejection of claim 1 above, except the polymer material is a PVC composition material that has a shore D hardness of 50.

Fan teaches a flexographic printing plate that is sensitive to laser radiation (col. 1, lines 6-12) and that has polyvinyl chloride in the IR sensitive layer (col. 6, line 26). Such a material composition provides flexographic printing plates with known good printing characteristics that can be produced quickly and economically by using digital imaging means (col. 2, lines 43-45).

Recchia teaches a process for making a flexographic printing plate (col. 9, line 9) that has a hardness between Shore A 50 and Shore D 60. Recchia teaches that plates with a Shore hardness in this range offer excellent printing characteristics and resistance to wear (col. 2, lines 16-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cushner such that the polymer material is PVC, because Fan teaches that PVC provides flexographic printing plates with known good printing characteristics that can be produced quickly and economically by using digital imaging means.

Art Unit: 2854

It would have been obvious to one having ordinary skill in the art at the time the invention was made to additionally modify Cushner such that the hardness of the material is Shore D 50, because Recchia teaches that flexographic printing plates having this hardness offer excellent printing characteristics and resistance to wear.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cushner in view of Fan and Recchia, and further in view of Allen, US 4,264,705 (Allen).

The combination of Cushner, Fan, and Recchia substantially teaches all that is claimed as discussed in the rejection of claim 3 above, except wherein the inner layer had a Shore D hardness of 50 and the outer layer a Shore A hardness of 70.

Allen teaches that while the backing layer of multiplayer printing plates is usually of lower hardness than the printing layer to allow the plate to conform better to irregular surfaces, it is sometimes advantageous to have a backing that is harder than the printing layer, depending upon a variety of factors (col. 2, lines 5-20). Allen teaches a range of hardness for the layers between Shore A 30 and 90 (col. 8, line 13). Allen also teaches an example where the printing layer has a hardness of Shore A 50 and the backing layer has a hardness of Shore A 90.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Cushner such that the inner layer had a Shore D hardness of 50 and the outer layer a Shore A hardness of 70 through the course of routine experimentation, because one having ordinary skill would recognize that the specific hardness needed will vary depending on the exact printing conditions, and these values are

Art Unit: 2854

within the ranges taught by Allen and Recchia as suitable for flexographic printing plates and backing layers.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cushner in view of Fan.

Cushner teaches all that is claimed as discussed in the rejection of claim 1 above, including a metal base plate (col. 16, line 30).

Cushner does not teach the polymer material is made of PVC.

Fan teaches a flexographic printing plate that is sensitive to laser radiation (col. 1, lines 6-12) and that has polyvinyl chloride in the IR sensitive layer (col. 6, line 26). Such a material composition provides flexographic printing plates with known good printing characteristics that can be produced quickly and economically by using digital imaging means (col. 2, lines 43-45).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cushner such that the polymer material is PVC, because Fan teaches that PVC provides flexographic printing plates with known good printing characteristics that can be produced quickly and economically by using digital imaging means.

9. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cushner in view of Koelsch, US 6,318,261.

A. Regarding claim 6:

Art Unit: 2854

Cushner teaches all that is claimed as discussed in the rejection of claim 1 above, except a cylinder comprising at least one slot and means for clamping at least one inking plate around its circumference, said cylinder comprising an inking plate.

Koelsch teaches a cylinder (24, Fig. 2) with a slot (28, Fig. 2) and means for clamping (70, Fig. 4) at least one flexographic plate (col. 1, line 6). Such a means for clamping offers improved strength and rigidity and does not interfere with the flexographic printing process (col. 2, lines 19-33).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cushner to include a cylinder comprising at least one slot and means for clamping at least one inking plate around its circumference, said cylinder comprising an inking plate, because Koelsch teaches that such a cylinder and clamping means offer improved strength and rigidity and does not interfere with the flexographic printing process.

B. Regarding claim 7, the combination of Cushner and Koelsch teaches all that is claimed as discussed above, including a printing machine (Cushner, "for use in flexographic printing," col. 1, lines 13-14; to perform flexographic printing, a printing machine is implied).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2854

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANDREW H. HIRSHFELD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Leo T. Hinze
Patent Examiner
AU 2854
26 October 2004